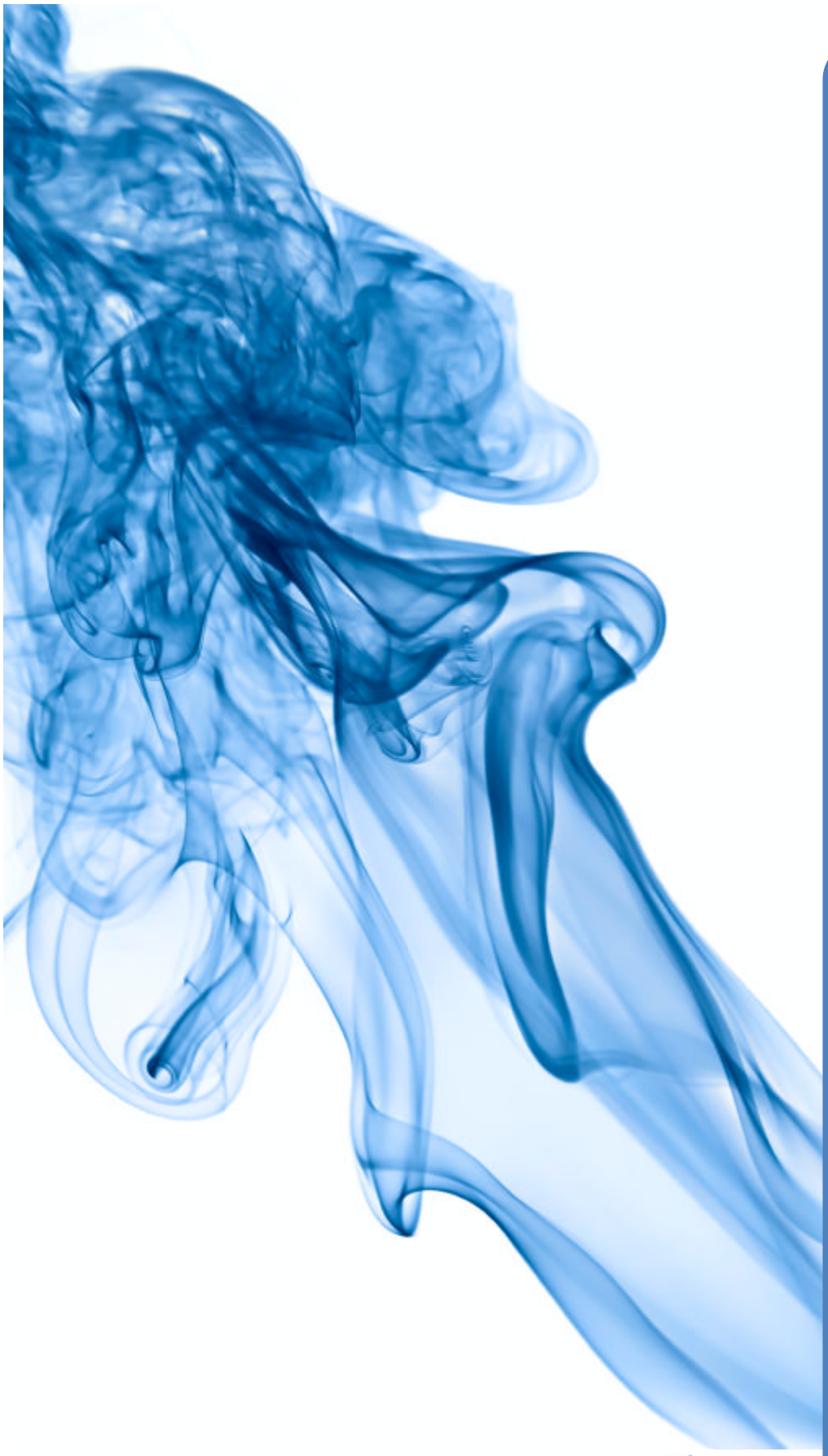

Configuration Manual

FlatMan®

Industrial Monitor

Optional with touchscreen and/ or bezel

8.4”	/ 21,34cm
10.4”	/ 26,41cm
12”	/ 30,48cm
15”	/ 38,10cm
17”	/ 43,18cm
19”	/ 48,26cm

Language: English

FB084SIxxDDxx

FB104SIxxDDxx

FB121SIxxDDxx

FS150SIxxDDxx

FS170SBxxDDxx

FS190SBxxDDxx

FS190WBxxDDxx

F2150SIxxDDxx

F2170SBxxDDxx

F2190SBxxDDxx

s&t embedded

www.snt-embedded.de

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Picture source: http://www.stockvault.net/photo/118566/smoke by 2happy

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Safety Instructions

Before handling the product, read the instructions and safety guidelines on the following pages to prevent damage to the product and to ensure your own personal safety. Refer below for the notational conventions:

Please pay extra attention to this warning, otherwise, it may result in device damage, property damage, personal damage or even death.

Note. Please read and pay attention to the advices marked with this warning.

High voltage warning.

Always use caution when handling/operating a monitor. Only qualified, experienced, authorized electronics service personnel should access the interior of a monitor. The power supplies produce high voltages and energy hazards, which can cause bodily harm.
Use extreme caution when installing or removing components. Refer to the installation instructions in this user's guide for precautions and procedures. If you have any questions, please contact s&t Post-Sales Technical Support.

WARNING
High voltages are present inside the chassis when the unit's power cord is plugged into an electrical outlet. Turn off system power, turn off the power supply, and then disconnect the power cord from its source before removing the chassis cover.
Turning off the system power switch does not remove power to components

---

1. Introduction

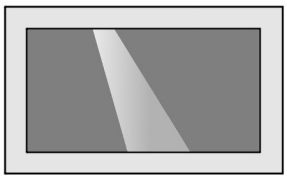
Product Description

Congratulations on your purchase of a LCD monitor. It incorporates high quality display into a small light weighted module. It has power-saving capabilities and emits no radiation. You will certainly benefit from this monitor in lots of ways; to name some of them: comfort safety, and environmental protection.

This LCD monitor incorporates a color active matrix thin-film-transistor (TFT) liquid crystal display to provide superior display performance. Its maximum resolution is ideal for displaying complex graphics and high definition images. Its other outstanding capabilities include audio system and OSD (On Screen Display) controls.

8.4”	resolution SVGA	800×600
10.4”	resolution SVGA	800×600
12"	resolution SVGA	800×600
15"	resolution XGA	1024×768
17"	resolution SXGA	1280×1024
19"(4:3)	resolution SXGA	1280×1024
19"(16:10)	resolution WXGA+	1440×900

Package Contents

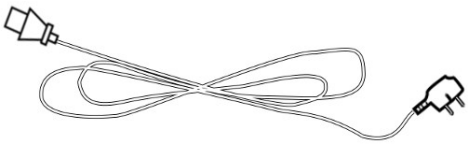


TFT LCD monitor

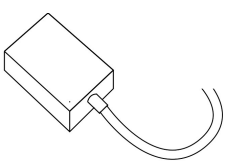
D-sub signal cable (VGA)

DVI cable

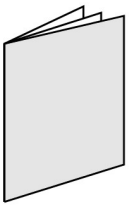
Included with your LCD monitor are following items. If there are any missing accessories, please contact us immediately.



AC power cord



Power adaptor



Manual

Optional for touch screen models:
- USB or RS232 cable
- Driver CD

Product Features

- High contrast color TFT LCD display
- Compatible VESA standards.
- Imbedded audio system provides sound performance.
- Power management system conforms to VESA DPMS standard.
- Support DDC 1/2B for Plug & Play compatibility.
- Advanced OSD control for picture quality adjustment.
- Detachable stand for wall-mounting application.
- Support HDMI V1.0 (Option only DVI model).

Screen cleaning techniques

- Gently clean the screen with a clean camel hair lens brush, or a soft, clean, lint-free cloth, to remove dust and other particles that can scratch the screen.
- Do not apply pressure to the screen surface when wiping it clean.
- Do not pour or spray any liquid directly onto the screen or casing. Chemical cleaners have been reported to damage the screen or case of the LCD monitor.

Additional

Read all of these instructions and save them for later use.
Follow all warnings and instructions on the product.

Product

- Do not cover block the vent holes in the case.
- Do not insert sharp objects or spill liquid into the LCD monitor through cabinet slots. They may cause accident fire, electric shock or failure.
- Disconnect the power plug from the AC outlet if you will not use it for an extended period of time.
- Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks.
- Do not touch the screen directly with your fingers. You may damage the screen, and oil from your skin is difficult to remove.
- Do not apply pressure to screen. The LCD is very delicate.

Power

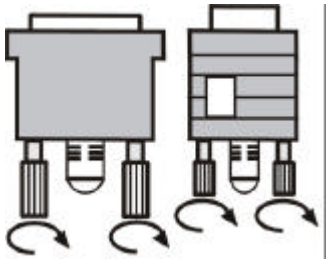
- Use the type of power indicated on label.

Plugs

- Do not remove any of the prongs of the monitor's three-pronged power plug.
- Disconnect the power plug from the AC outlet under following conditions:

- If you will not use it for an extended period time.
- When the power cord or plug is damaged or frayed.
- If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions. Improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician.
- If the product exhibits a distinct change in performance, service may be required.

CAUTION



- Connect the signal input cable and tighten it by turning the screws clockwise.
- Do not press the screen with your finger for a long time. This may result in damage.
- Avoid displaying a fixed image on the screen for a long period of time as it might end with image burn. Use a screensaver if possible.

Power and extension cords

- Do not allow anything to rest on the power cord.
- Do not locate this product where persons will walk on the cord.
- Use the proper power cord with correct attachment plug type. If the power source is 120V AC, use a power cord that has UL and C-UL approvals, If the power source is a 240V AC supply, use the tandem (T blade) type attachment plug with ground conductor power cord that meets the respective European country's safety regulations, such as VDE for Germany.
- Do not over load wall outlets or power cords. Ensure that the total of all units plugged into the wall outlet does not exceed 10 amperes.

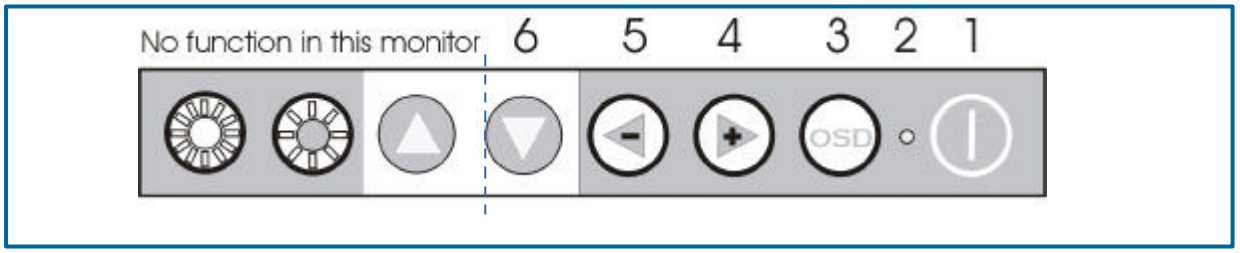
- Ensure that the total ampere ratings on all units plugged into the extension cord is not above the cord's rating.
- If the power supply cord, which came with your monitor, is to be connected to the PC instead of the wall outlet, Use an UL/TUV approved computers with receptacle rated 100~240V AC, 50/60Hz, 1.0A (minimum) only.

Environment

- Place the monitor on a flat and levelled surface.
- Place the monitor in a will-Ventilated place.
- Keep the monitor away from:
  - overly hot places
  - cold places
  - humid places
  - places directly under sunlight
  - dusty surroundings
  - equipment that generate strong magnetic fields
- Please adjust the frequency to 75 Hz after setting up the LCD monitor.
- Then push the OSD menu button and use the Auto Adjust function to find the best mode of your computer.

2. Control Functions

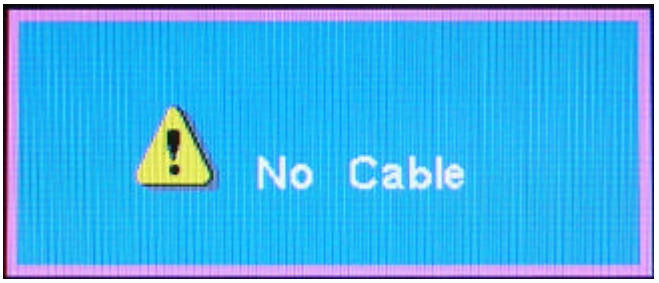
Control Button Front View



1. Power Switch	Power switch
2. LAMP LED	Power LED
3. OSD menu / select ➔	Pressing this button pops up the OSD menu on the screen. Add used to select the OSD control options on the screen
4. Adjust (increase +)	This button is used to adjust the increasing value of selected
5. Adjust (decrease -)	This button is used to adjust the decreasing value of selected
6. Auto adjust / select ➔	Select this function to obtain the best display efficiency. OSD Windows display is function selection

OSD Control Panel

This OSD Window status will appear when pressing the **AUTO** button.
The screen will be automatically adjusting.



If there is no VGA or DVI signal input, “No Cable” will display for 3 seconds.

OSD Control: displays of adjustments

OSD Buttons

- Pressing the MENU button will display OSD Windows
- Pressing AUTO button: left face selection function
- Pressing MENU button: right face selection function
- Pressing + button: increase the selection function value
- Pressing - button: decrease selection function value

Brightness:
Adjust the Brightness using + and - buttons.

Contrast:
Adjust the Contrast using + and - buttons.

Horizontal Position:
Adjust the Horizontal Position using + and - buttons. (VGA mode only)

Vertical Position:
Adjust the Vertical Position using + and - buttons. (VGA mode only)

Sharpness:
Adjust the Sharpness using + and - buttons. (VGA mode only)

OSD Transparency:
Adjust the OSD Transparency using + and - buttons.

Phase:
Adjust the Phase using + and - buttons. (only VGA mode)

Clock:
Adjust the Clock using + and - buttons. (only VGA mode)

Color Temperature:
Select the Color Temperature using + and - buttons.
6500ºK - 7500ºK - 9300ºK - USER
(USER adjust see sub OSD window)

Horizontal OSD Position:
Adjust the Horizontal OSD Position using + and - buttons.

Vertical OSD Position:
Adjust the Vertical OSD Position using + and - buttons.

Graphic Text:
Graphic : VGA 640×400
Text : VGA 720×400
Only for VGA 600×400 & VGA720×400 Selection

Recall:

Select the Recall using + and - buttons.
Recall factory model

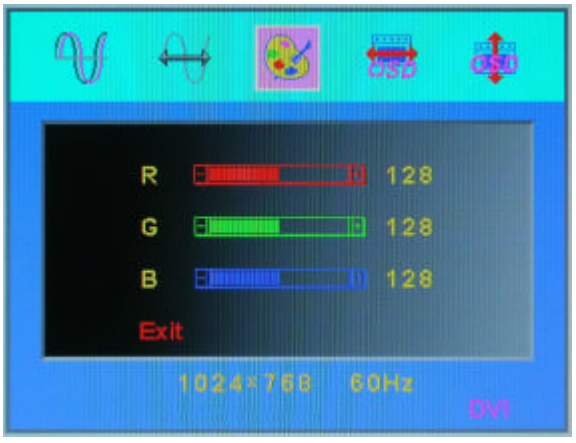
Language:
Select the Language using + and - buttons.
Supports English – Français – Deutsch – Español -
Italiano – Russian – Chinese simplified - Chinese- traditional - Japanese.

Auto Adjustment:
Select the Auto Adjustment using + and - buttons.
Image shall be occupied full screen, then this function is effective.
(VGA mode only)

Exit:
Select the Exit using + and - buttons.

Input Select:
Select the VGA or DVI input using + and - buttons.

OSD User's definition of color temperature



Pressing AUTO button: upward selection function
Pressing MENU button: downward selection function
Pressing **+** button: increase the selection function value
Pressing **-** button: decrease selection function value

3. Input Diagrams

3.6 3.1 3.2 3.3 3.4 3.5

3.1 DVI - D Video

For the digital video signal DVI-D.

3.2 RGB Video - VGA

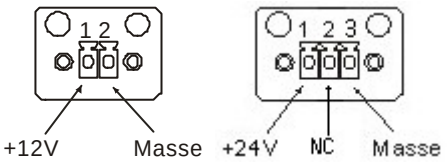
Video signal connector for analogue RGB Video signal 15-pin D-Sub.

3.3 RS-232 connector DE-9

Touch connector

3.4 USB Touch connector (TYP A)

3.5 POWER



Input green threaded coupling connector
The power connector for the industrial monitor is a green Phoenix (Type MC 1,5/2-STF-3,5). Please use the external power supply SPU63-105 only.
There are two types: 2-pin 12V and 3-pin 24V. Optionally you receive the 24VDC connector.

3.6 ADDITIONAL POWER CONNECTOR for DC adapter cable.

This is for connection of the DC cable adapter. Inside is +12VDC; outside is Ground.

CAUTION

Both Power connectors are for alternative power input!
NOT FOR THE OUTPUT!

4. Setup

Electrical Connection

Please follow the instructions below to properly connect the LCD monitor to external electrical source.

1. Connect the female-end of the power cable to the transformer. Connect the male-end of the power cable to the wall outlet or extension cable.
2. Connect the cable from the other end of the transformer to the LCD monitor DC IN located at the back of the LCD monitor.

Signal Connection

1. Power off both the LCD monitor and PC system before connecting them.
2. Take out the signal cable from the box; connect it to the signal connector at the back of the LCD monitor.
3. Connect the other end to the signal connector on the back of the PC system.
4. Please make sure the connections to both the PC system unit and the LCD monitor are strong and secure.
   Please don't forget to tighten the screws on each connector end.
5. Now turn on both the PC system unit and the LCD monitor.
6. After you finish setting up the LCD monitor, please set the refresh rate to 75Hz.
7. After setting up the LCD monitor, please perform Auto Adjust in OSD so that the LCD monitor will be automatically set to optimal color display each time.

Please note: When you disconnect any power cable or signal cable, please do not pull the cable by grabbing the cable body.
Please grab the cable connector itself whenever you try to pull the cable during disconnection.

5. Troubleshooting

Check the following before calling for service and support

No image is showing	
Is the power cord connected to the monitor?	• Check and make sure that the power cord is connected to both the monitor and the power outlet
Is the power LED light next to the power switch on?	• Press the power button to switch on the monitor. The LED should be green.
Is the power LED orange?	• Press Auto Adjust • Check the signal cable (VGA or DVI) • Is the graphic card working normally?
Is the power on but you still don't have a picture?	• Adjust brightness and contrast
Do you see a "No Signal" message?	• If the monitor is on "No Signal" in a short period the device goes into the sleeping mode/ shuts down.
Do you see a "No Cable" message?	• Connect the VGA or the DVI signal cable

Display image is incorrect	
Display position is incorrect.	• Press the 6. button: **AUTO** adjust to automatically adjust your display to the ideal setting.
Vertical bars and stripes appear on the screen?	• Press the 6. button: **AUTO** adjust to automatically adjust your display to the ideal setting.
The color of the screen is abnormal	• Check if the signal cable is properly attached • Set the color settings in the **OSD Control Panel**: Contrast or Color Temperature
There is noise on the screen or the pixels don't match	• Press the 6. button: AUTO adjust to automatically adjust your display to the ideal setting • Set manually in the OSD Control Panel: See OSD Contol Panel (p. 9)

6. Product Specification

8.4“ Specification

Type / Spec	PC
LCD Display	8.4" Active matrix TFT LCD panel
Pixel Pitch	0.213(H) x 0.213(V) mm
Max. Resolution	800(H) x 600(V) SVGA
Set Size	480(W) x 330(H) x 460(D) mm
Pack Size	422(H) x 426(V) x 214(D) mm (in 10 set)
Contrast Ratio	500 : 1(depending on panel spec)
Brightness	230 cd/m^2 (depending on panel spec)
Response Time	Tr : 10ms Tf : 25ms (depending on panel spec)
Display Color	265K
View Angle L+/R-	±60° (depending on panel spec)
U+/D-	+60°-40° (depending on panel spec)
PC Interface	RGB analog 0.7V peak to peak
PC Video Sync.	TTL positive or negative
Display Mode	VGA, SVGA
Audio in	DVI Connector
Video Connector	RCA Jack/ BNC Jack/
Audio Amplifier	2W ×2
Power consumption	ON < 25W (maximum)
Frequency	(Horizontal) 31.5-48KHz (Vertical) 56-75Hz
Signal Connector	D-sub 15 pin
Front Control	Auto adjust, Power SW with LED, OSD Menu, +/- Adjustment
OSD Menu	Brightness, Contrast, Auto Adjust, Clock, Phase, H-Position, V-Position, Language
Power Adapter	AC Input : 100-240V~1.8A, 50-60Hz DC Output : 12V/ 4.16A
Operating Conditions	Temperature : 0°C~40°C Humidity : 20% ~ 85%
Storage Conditions	Temperature : -20°C~60°C Humidity : 10%~95%
Certification	BSMI,FCC (DOC), CE-B, TUV/GS, UL,CUL
Weight	Net 1.4Kgs Gross 12.5Kgs (in 5 set)

10.4” Specification

Type / Spec	DVI
LCD Display	10.4" Active matrix TFT LCD panel
Pixel Pitch	0.264 (H) x 0.264(V) mm
Max. Resolution	800(H) x 600(V) SVGA
Set Size	265(W) x 208(V) x 48(D) mm
Pack Size	395(W) x 320(H) x 275(D) mm (in 5 set)
Contrast Ratio	500 : 1(depending on panel spec)
Brightness	230 cd/m^2 (depending on panel spec)
Response Time	Tr : 10ms Tf : 25ms (depending on panel spec)
Display Color	265K
View Angle L+/R-	±60° (depending on panel spec)
U+/D-	+60°-40° (depending on panel spec)
PC Interface	RGB analog 0.7V peak to peak
PC Video Sync.	TTL positive or negative
Display Mode	VGA, SVGA
Audio in	DVI Connector
Video Connector	RCA Jack/ BNC Jack/
Audio Amplifier	2W ×2
Power consumption	ON < 25W (maximum)
Frequency	(Horizontal) 31.5-48KHz (Vertical) 56-75Hz
Signal Connector	D-sub 15 pin
Front Control	Auto adjust, Power SW with LED, OSD Menu, +/- Adjustment
OSD Menu	Brightness, Contrast, Auto Adjust, Clock, Phase, H-Position, V-Position, Language
Power Adapter	AC Input : 100-240V~1.8A, 50-60Hz DC Output : 12V/ 4.16A
Operating Conditions	Temperature : 0°C~40°C Humidity : 20% ~ 85%
Storage Conditions	Temperature : -20°C~60°C Humidity : 10%~95%
Certification	BSMI,FCC (DOC), CE-B, TUV/GS, UL,CUL
Weight	Net 1.4Kgs Gross 12.5Kgs (in 5 set)

12” Specification

Type / Spec	DVI
LCD Display	12" Active matrix TFT LCD panel
Pixel Pitch	0.3075(H) x 0.3075(V) mm
Max. Resolution	800(H) x 600(V) SVGA
Set Size	310(W) x 239(H) x 46(D) mm
Pack Size	472(W) x 393(H) x 341(D) mm (in 5 set)
Contrast Ratio	500 : 1(depending on panel spec)
Brightness	400 cd/m^2 (depending on panel spec)
Response Time	Tr : 10ms Tf : 20ms (depending on panel spec)
Display Color	262K
View Angle L+/R-	±60° (depending on panel spec)
U+/D-	+60°-40° (depending on panel spec)
PC Interface	RGB analog 0.7V peak to peak
PC Video Sync.	TTL positive or negative
Display Mode	VGA, SVGA
Video Connector	DVI connector
Audio Amplifier	2W ×2
Power consumption	ON < 25W (maximum)
Frequency	(Horizontal) 31.5-48KHz (Vertical) 56-75Hz
Signal Connector	D-sub 15 pin
Front Control	Auto adjust, Power SW with LED, OSD Menu, +/- Adjustment
OSD Menu	Brightness, Contrast, Auto Adjust, Clock, Phase, H-Position, V-Position, Language
Power Adapter	AC Input : 100-240V~1.8A, 50-60Hz DC Output : 12V/ 4.16A
Operating Conditions	Temperature : 0℃~40℃ Humidity : 20% ~ 85%
Storage Conditions	Temperature : -20℃~60℃ Humidity : 10%~95%
Certification	BSMI,FCC (DOC), CE-B, TUV/GS, UL,CUL
Weight	Net 2.0Kgs Gross 16.5Kgs (in 5 set)

15“ Specification

Type / Spec	DVI
LCD Display	15" Active matrix TFT LCD panel
Pixel Pitch	0.297(H) x 0.297(V) mm
Max. Resolution	1024(H) x 768(V) XGA
Set Size	392(W) x 300(H) x 50(D) mm
Pack Size	565(H) x 410(V) x 515(D) mm (in 5 set)
Contrast Ratio	500 : 1 (depending on panel spec)
Brightness	300 cd/m^2 (depending on panel spec)
Response Time	Tr : 12ms Tf : 4ms (depending on panel spec)
Display Color	16.777M
View Angle L+/R-	±80° (depending on panel spec)
U+/D-	+65°-80° (depending on panel spec)
PC Interface	RGB analog or digital 0.7V peak to peak
PC Video Sync.	TTL positive or negative
Display Mode	VGA, SVGA, XGA
Video Connector	DVI Connector
Power consumption	ON < 40W (maximum)
Frequency	(Horizontal) 31.5-60KHz (Vertical) 56-75Hz
Signal Connector	D-sub 15 pin
Front Control	Auto adjust, Power SW with LED, OSD Menu, +/- Adjustment
Power Adapter	AC Input : 100-240V~1.8A, 50-60Hz DC Output : 12V/ 4A or 4.14\6A
Operating Conditions	Temperature : 0°C~40°C Humidity : 20% ~ 85%
Storage Conditions	Temperature : -20°C~60°C Humidity : 10%~95%
Certification	FCC (DOC), CE-B,
Weight	Net 3.24Kgs **Net 7.1Kgs**
Weight	Gross 21.9Kgs (in 5 set)

17“ Specification

Type / Spec	DVI
LCD Display	17" Active matrix TFT LCD panel
Pixel Pitch	0.264(H) x 0.264(V) mm
Max. Resolution	1280(H) x 1024(V) SXGA
Set Size	442(W) x 361(H) x 52(D) mm
Pack Size	552(W) x 490(H) x 535(D) mm (in 5 set)
Contrast Ratio	400 : 1 (depending on panel spec)
Brightness	250 cd/m^2 (depending on panel spec)
Response Time	Tr : 15ms Tf : 10ms (depending on panel spec)
Display Color	16.777M
View Angle L+/R-	L+/R- ±85° U+/D- ±85°
U+/D-	+65°-80° (depending on panel spec)
PC Interface	RGB analog or digital 0.7V peak to peak
PC Video Sync.	TTL positive or negative
Display Mode	VGA, SVGA, XGA, SXGA
Video Connector	DVI Connector
Power consumption	ON < 45W (maximum)
Frequency	(Horizontal) 31.5-80KHz (Vertical) 56-75Hz
Signal Connector	D-sub 15 pin
Front Control	Auto adjust, Power SW with LED, OSD Menu, +/- Adjustment
Power Adapter	AC Input : 100-240V~1.8A, 50-60Hz DC Output : 12V/ 5.0A
Operating Conditions	Temperature : 0°C~40°C Humidity : 20% ~ 85%
Storage Conditions	Temperature : -20°C~60°C Humidity : 10%~95%
Certification	BSMI,FCC (DOC), CE-B,
Weight	Net 4.4Kgs **Net 9.8Kgs**
Weight	Gross 31.4Kgs (in 5 set)

F2150 monitor’s weight is different due to the full metal casing.

F2170 monitor’s weight is different due to the full metal casing.

19" (4:3) Specification

Type / Spec	DVI
LCD Display	19" Active matrix TFT LCD panel
Pixel Pitch	0.294(H) x 0.294(V) mm
Max. Resolution	1280(H) x 1024(V) SXGA
Set Size	442(W) x 361(H) x 52(D) mm
Pack Size	552(W) x 490(H) x 535(D) mm (in 5 set)
Contrast Ratio	700 : 1(depending on panel spec)
Brightness	250 cd/m^2 (depending on panel spec)
Response Time	Tr : 16ms Tf : 9ms (depending on panel spec)
Display Color	16.777M
View Angle L+/R-	±85° (depending on panel spec)
U+/D-	±85°(depending on panel spec)
PC Interface	RGB analog 0.7V peak to peak
PC Video Sync.	TTL positive or negative
Display Mode	VGA, SVGA, XGA, SXGA
Video Connector	DVI Connector
Power consumption	ON < 46W (maximum)
Frequency	(Horizontal) 31.5-80KHz (Vertical) 56-75Hz
Signal Connector	D-sub 15 pin
Front Control	Auto adjust, Power SW with LED, OSD Menu, +/- Adjustment
OSD Menu	Brightness, Contrast, Auto Adjust, Clock, Phase, H-Position, V-Position, Language
Power Adapter	AC Input : 100-240V~1.8A, 50-60Hz DC Output : 12V/ 5.0A
Operating Conditions	Temperature : 0°C~50°C Humidity : 20% ~ 85%
Storage Conditions	Temperature : -20°C~60°C Humidity : 10%~95%
Certification	FCC (DOC), CE
Weight	Net 5.2Kgs N **Net 10,8Kgs**
Weight	Gross 36.4Kgs (in 5 set)

19” (16:10) Specification

Type / Spec	DVI
LCD Display	19" Active matrix TFT LCD panel
Pixel Pitch	0.285(H) x 0.285(V) mm
Max. Resolution	1440(H) x 900(V) WXGA+
Set Size	456(W) x 331(H) x 54(D) mm
Pack Size	566(W) x 413(H) x 535(D) mm (in 5 set)
Contrast Ratio	500 : 1(depending on panel spec)
Brightness	300 cd/m^2 (depending on panel spec)
Response Time	Tr : 7ms Tf : 11ms (depending on panel spec)
Display Color	16.777M
View Angle L+/R-	±85° (depending on panel spec)
U+/D-	±85°(depending on panel spec)
PC Interface	RGB analog 0.7V peak to peak
PC Video Sync.	TTL positive or negative
Display Mode	VGA, SVGA, XGA, SXGA
Video Connector	DVI Connector
Power consumption	ON < 46W (maximum)
Frequency	(Horizontal) 31.5-80KHz (Vertical) 56-75Hz
Signal Connector	D-sub 15 pin
Front Control	Auto adjust, Power SW with LED, OSD Menu, +/- Adjustment
OSD Menu	Brightness, Contrast, Auto Adjust, Clock, Phase, H-Position, V-Position, Language
Power Adapter	AC Input : 100-240V~1.8A, 50-60Hz DC Output : 12V/ 5.0A
Operating Conditions	Temperature : 0°C~50°C Humidity : 20% ~ 85%
Storage Conditions	Temperature : -20°C~60°C Humidity : 10%~95%
Certification	FCC (DOC), CE
Weight	Net 5.2Kgs **Net 10,8Kgs**
Weight	Gross 36.4Kgs (in 5 set)

F2190 monitor’s weight is different due to the full metal casing.

PC Display Modes

Mode	Model	Resolution	H Freq (KHz)	V Freq (Hz)
1	15" 17" 19"	640 × 350	31.469	70.087
2	15" 17" 19"	640 × 400	31.469	59.940
3	15" 17" 19"	640 × 480	31.469	59.940
4	15" 17" 19"	640 × 480	37.500	75.000
5	15" 17" 19"	800 × 600	37.879	60.317
6	15" 17" 19"	800 × 600	46.875	75.000
7	15" 17" 19"	1024 × 768	48.363	60.004
8	15" 17" 19"	1024 × 768	60.023	75.029
9	17" 19"	1280 × 1024	63.981	60.020
10	17" 19"	1280 × 1024	79.976	75.025

PC Display Modes FS190WB

Mode	Resolution	H Freq (KHz)	V Freq (Hz)
1	640 × 350	31.469	70.087
2	640 × 400	31.469	59.940
3	640 × 480	31.469	59.940
4	640 × 480	37.500	75.000
5	800 × 600	37.879	60.317
6	800 × 600	46.875	75.000
7	1024 × 768	48.363	60.004
8	1024 × 768	60.023	75.029
9	1360 × 768	47.712	60.015
10	1440 × 900	55.935	59.887

PC (VGA&HDMI) Display Modes 8.4”

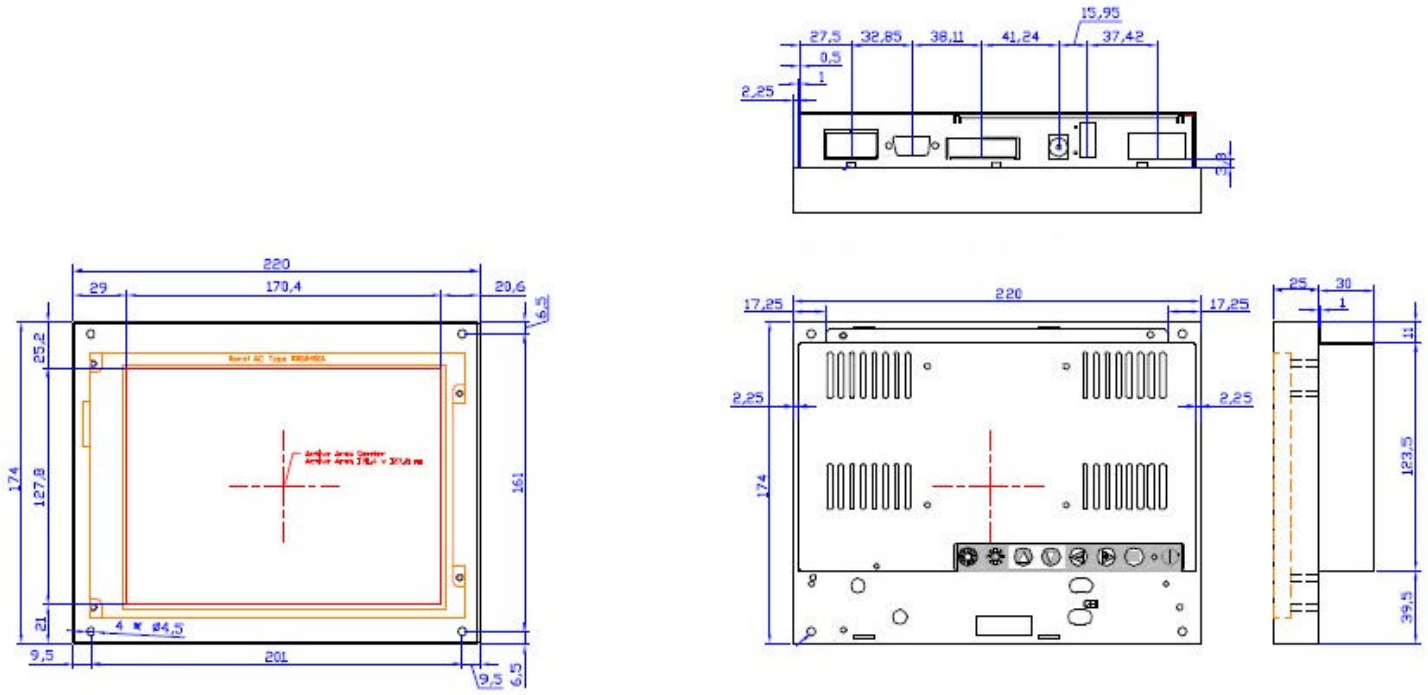
Mode	Resolution	H Freq (KHz)	V Freq (Hz)
1	640 × 480	31.469	59.940
2	640 × 480	37.500	75.000
3	800 × 600	37.879	60.317
4	800 × 600	46.875	75.000

PC (VGA&HDMI) Display Modes 12“

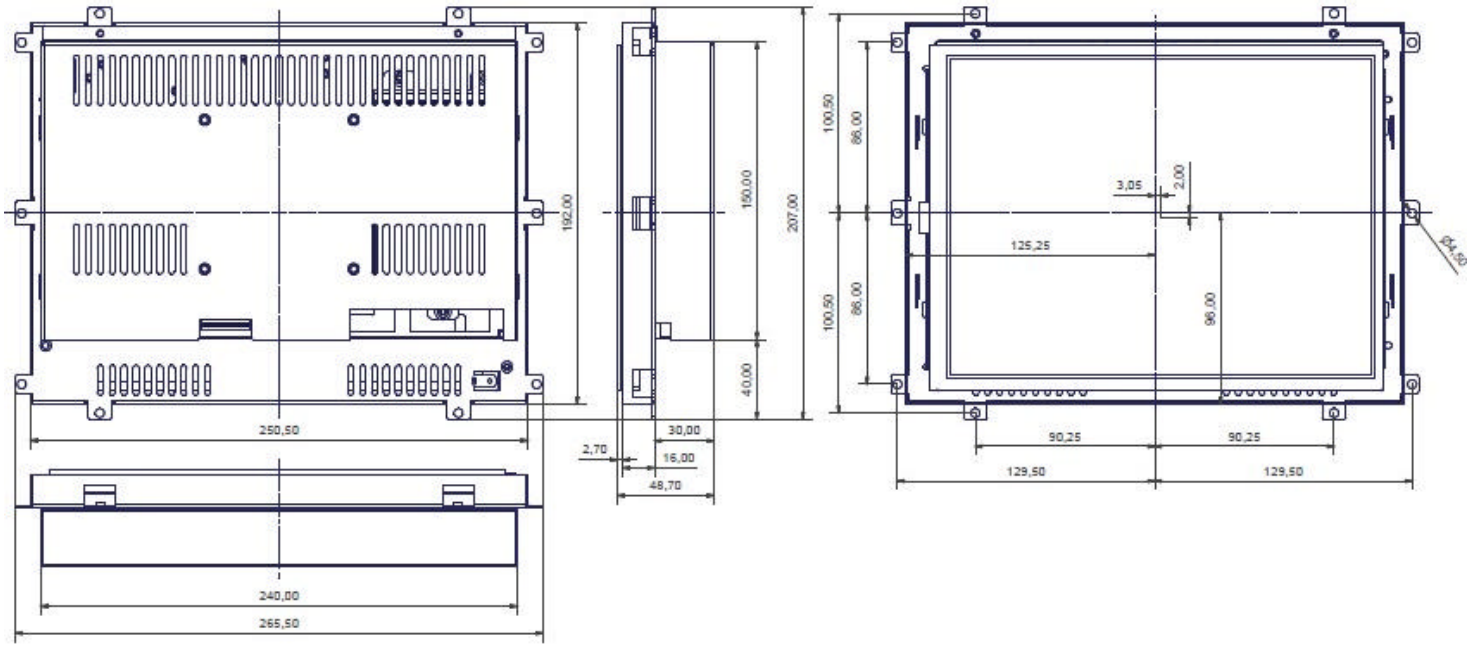
Mode	Resolution	H Freq (KHz)	V Freq (Hz)
1	640 × 350	31.469	70.087
2	640 × 400	31.469	59.940
3	640 × 480	31.469	59.940
4	640 × 480	37.500	75.000
5	800 × 600	37.879	60.317
6	800 × 600	46.875	75.000

7. Mechanical Dimensions

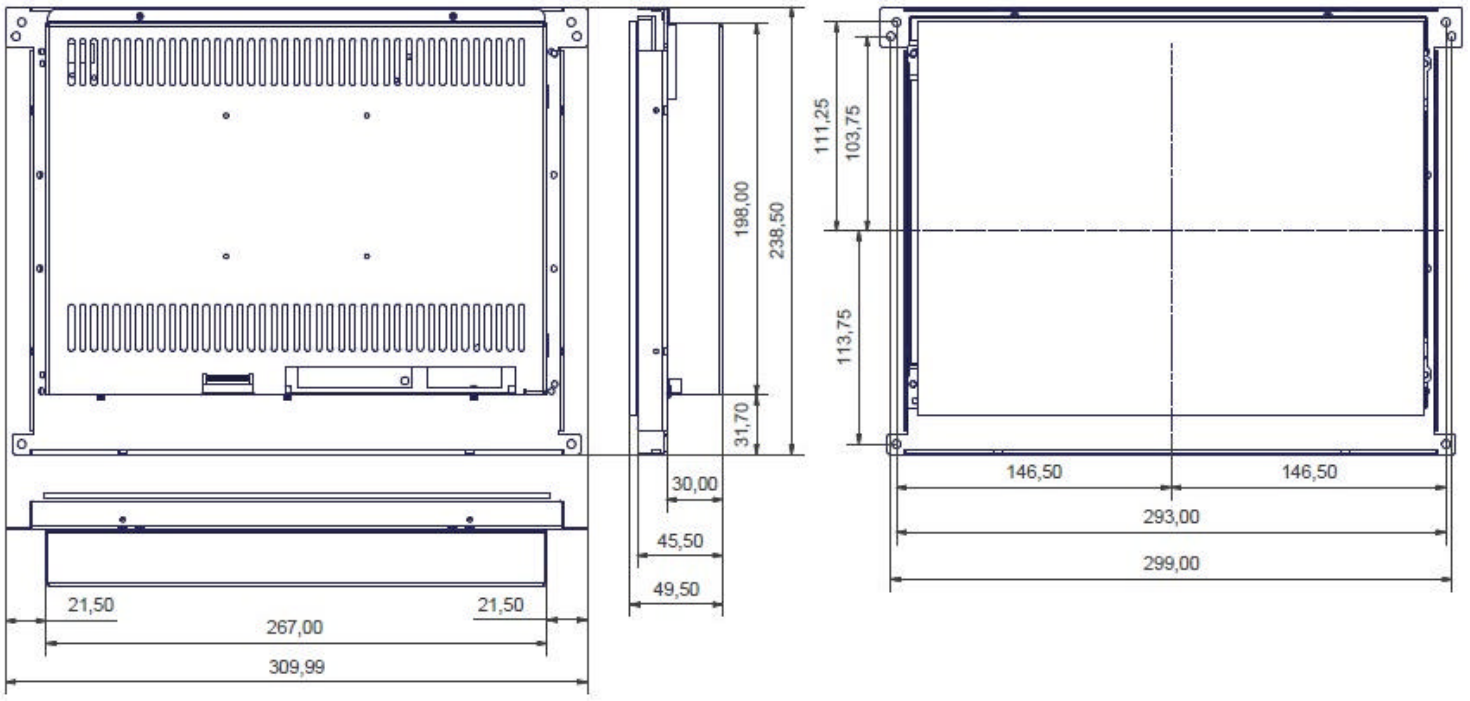
8.4“ Chassis OEM



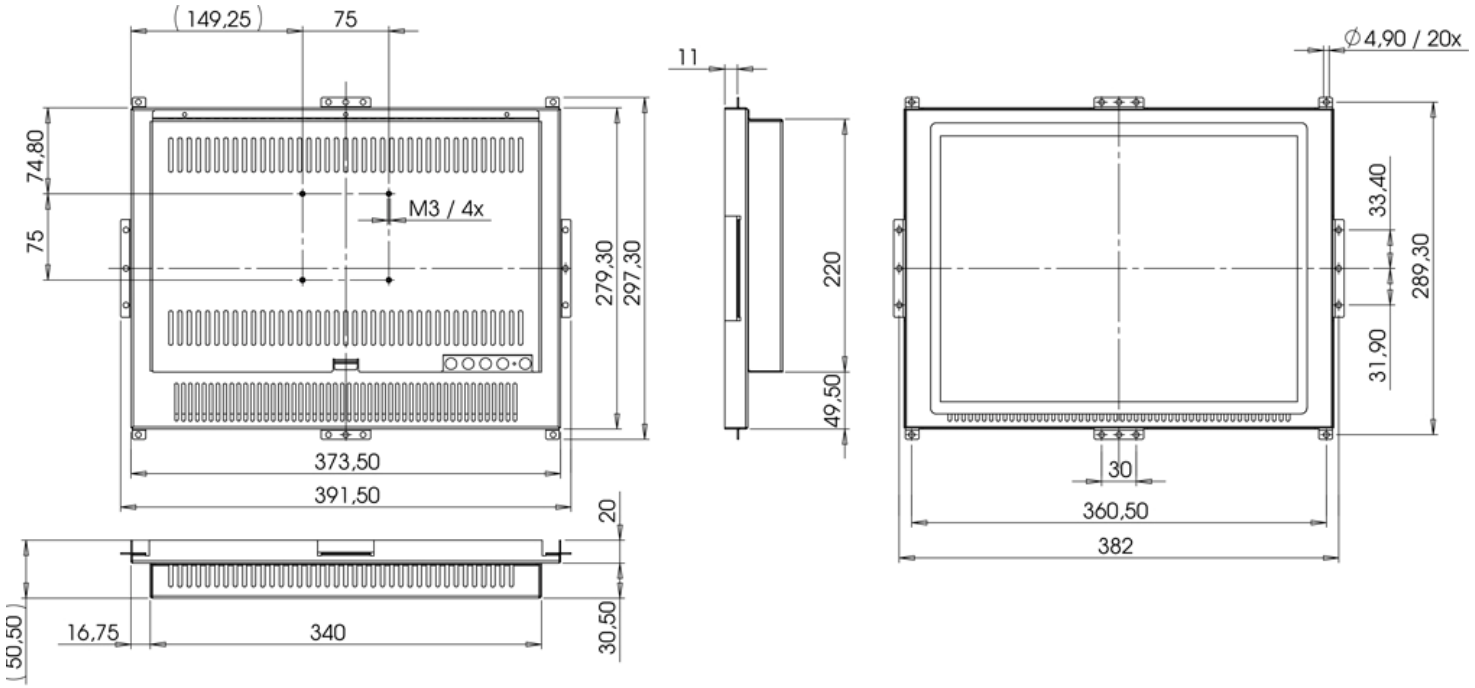
10.4” Chassis OEM



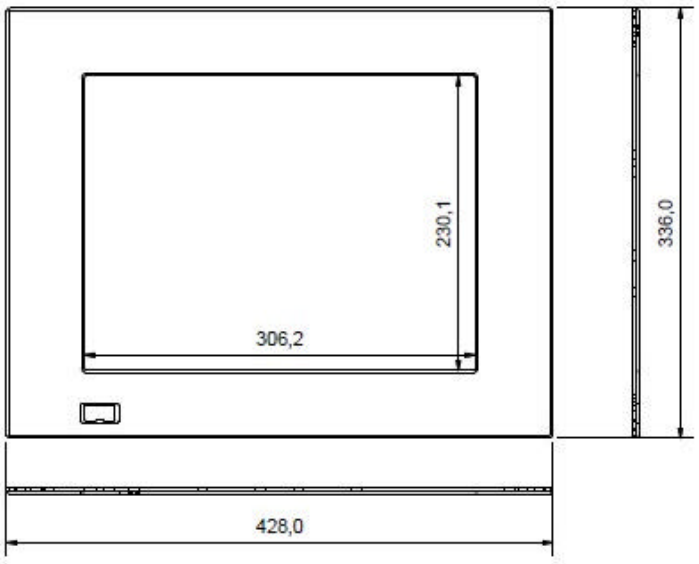
12“ Chassis OEM

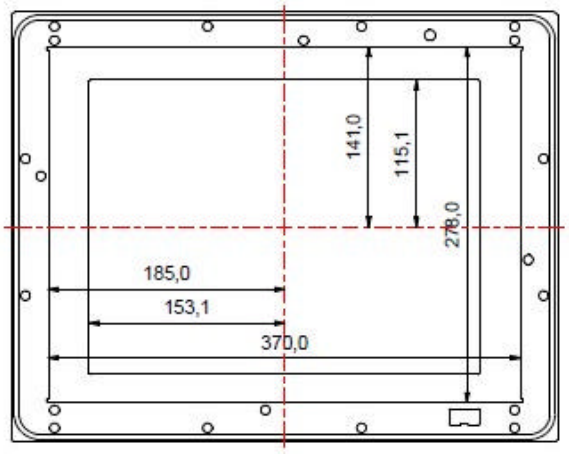


15“ Chassis OEM

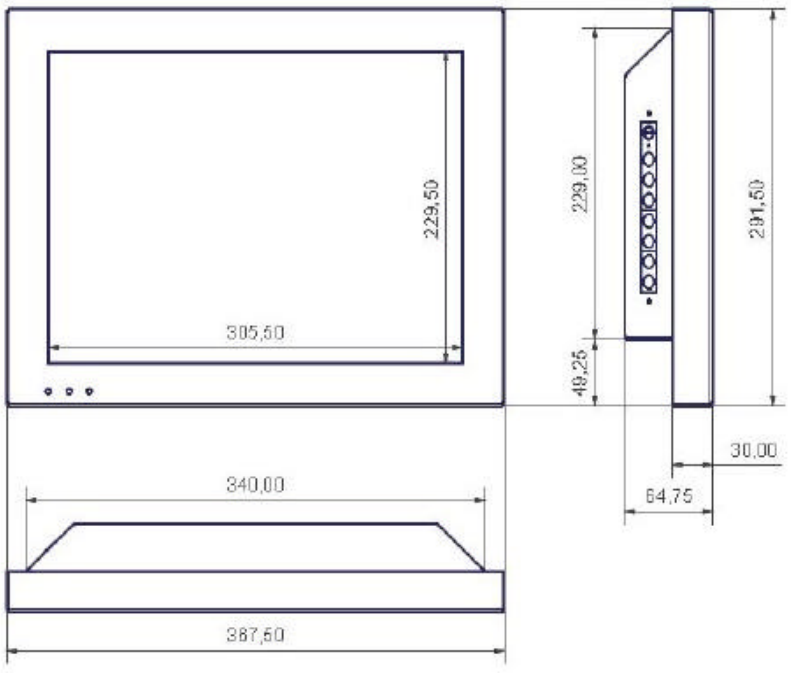


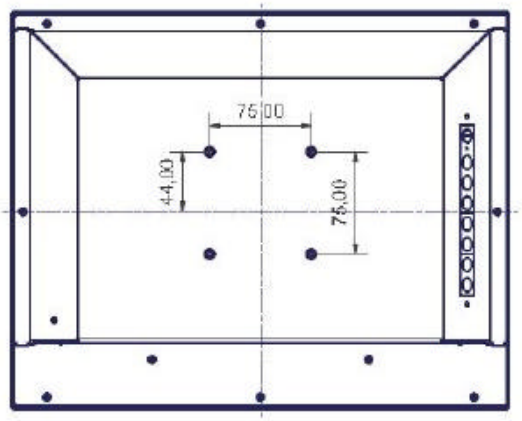
Optionally a monitor with a bezel can be bought. Thus the dimensions are different. Here is an example for a 15” bezel:



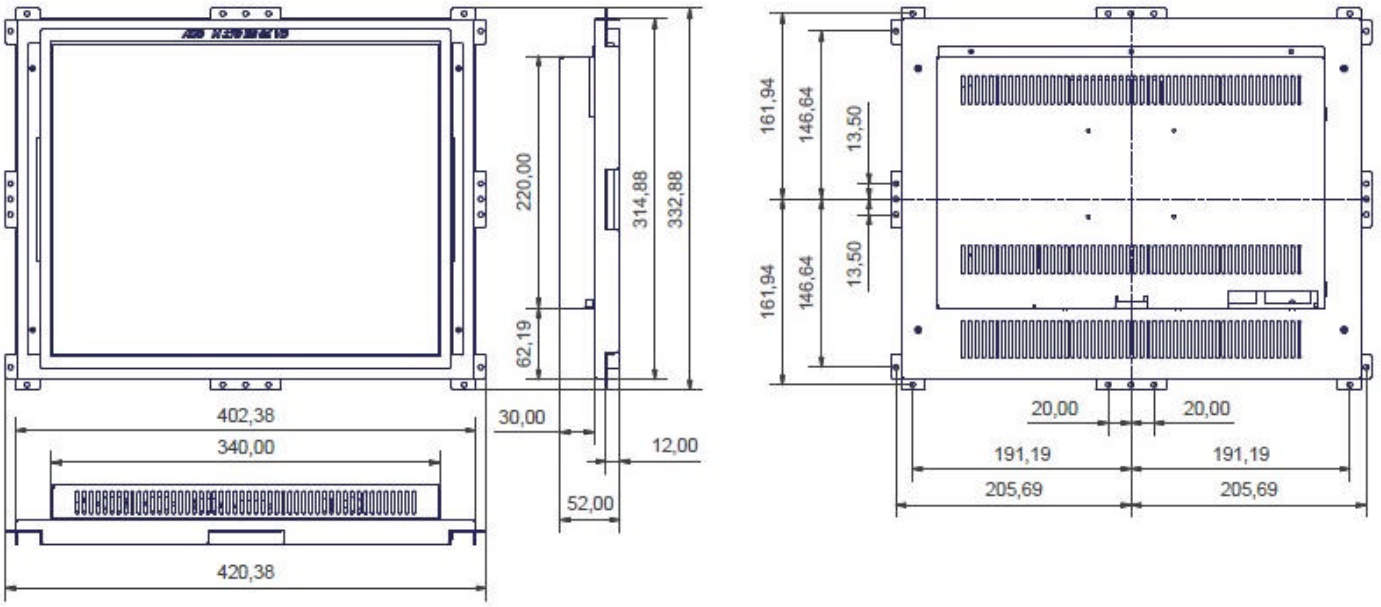


Optionally a monitor with full-metal casing can be bought. Thus the dimensions are different. Here is an example for a 15” full metal monitor F2:

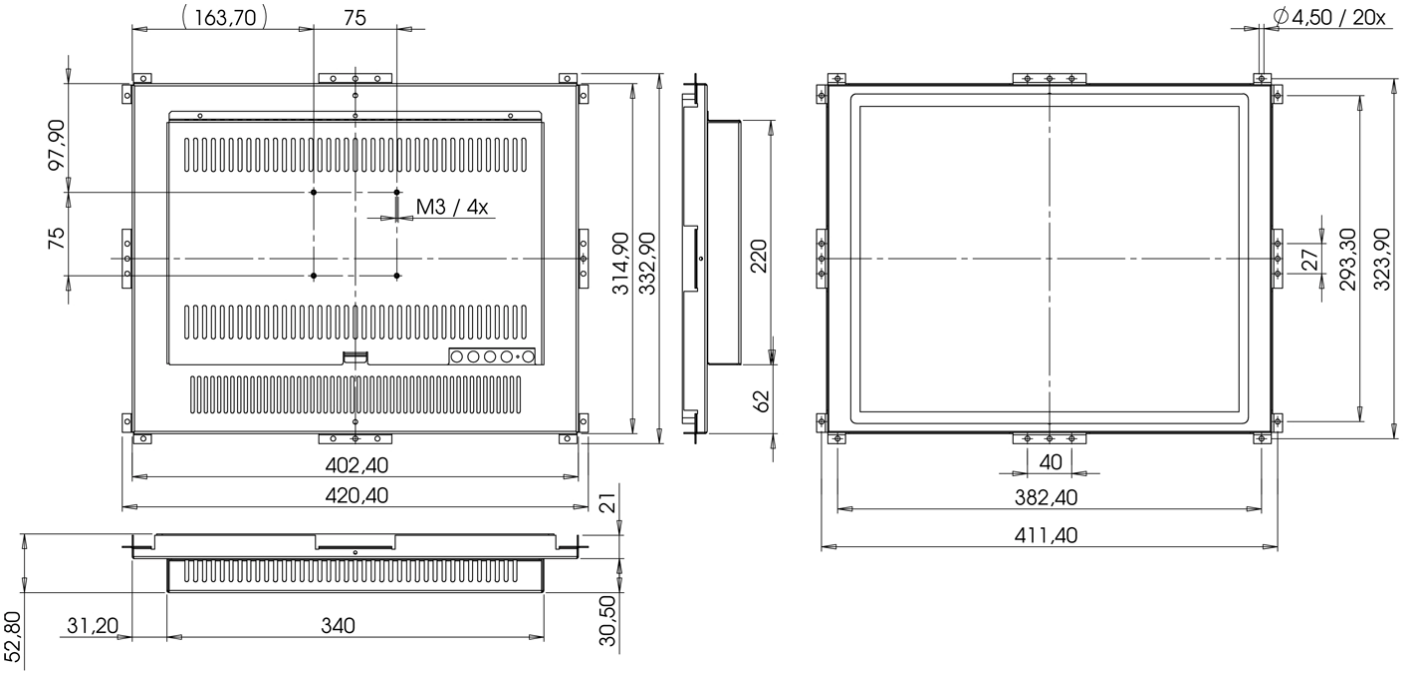




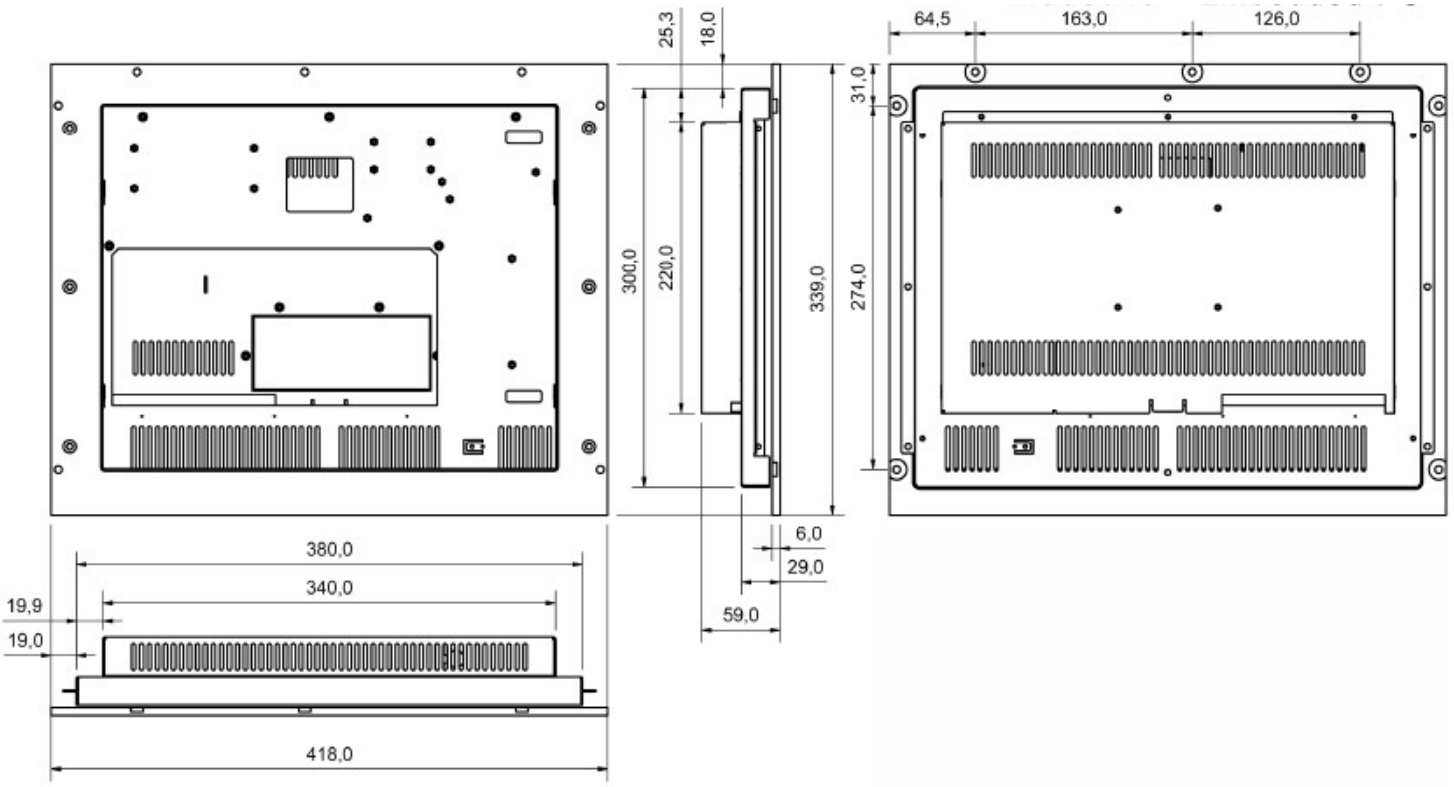
17“ Chassis OEM



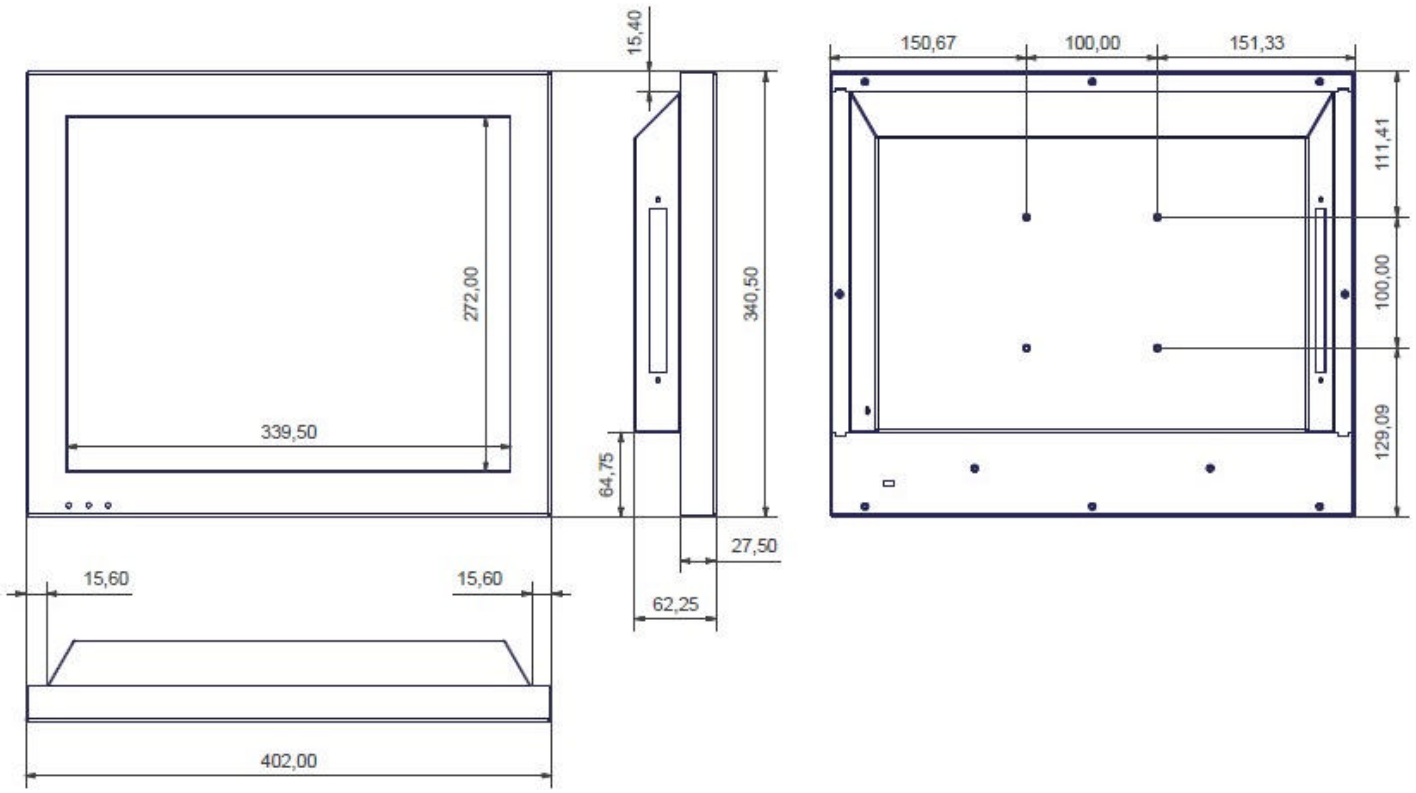
17“ Chassis OK monitor (smaller as OE)



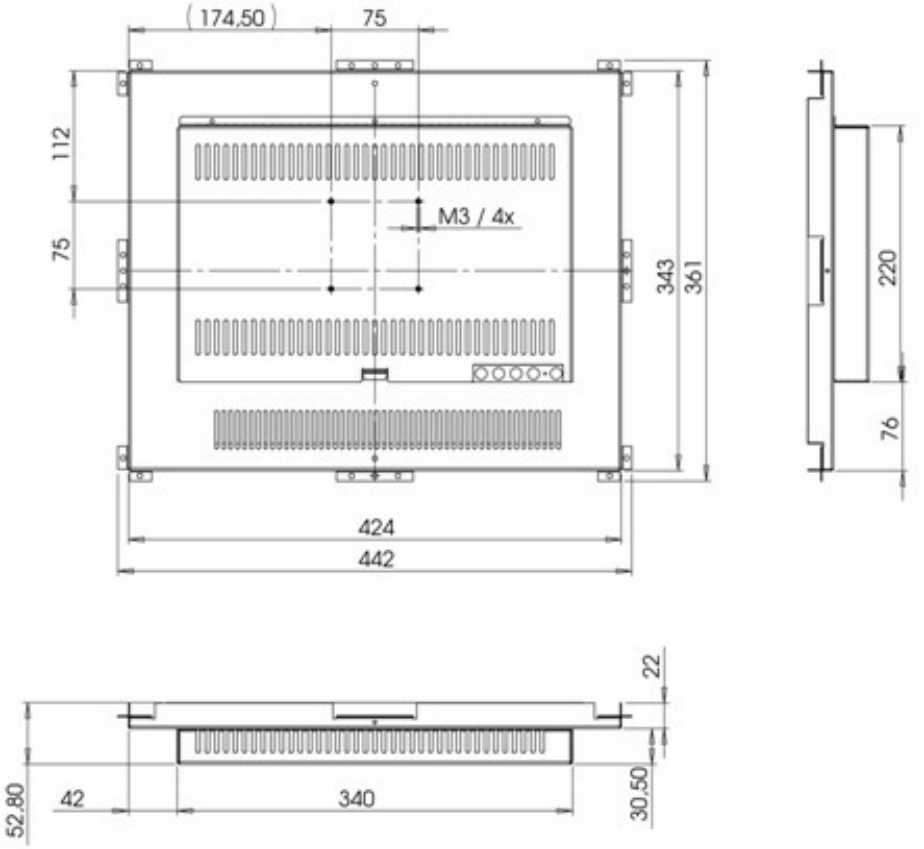
Optionally a monitor with a bezel can be bought. Thus the dimensions are different. Here is an example for a 17” monitor with a plastic bezel:



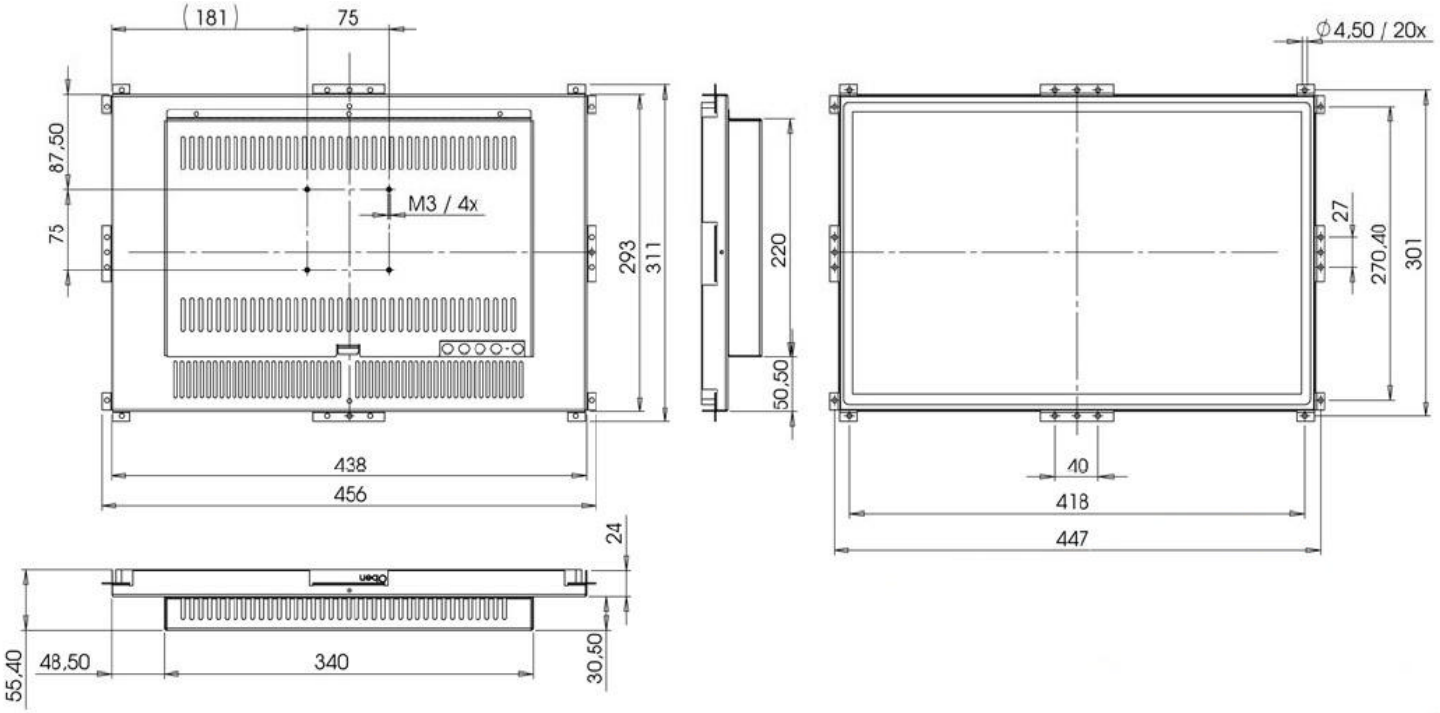
Optionally a monitor with full-metal casing can be bought. Thus the dimensions are different. Here is an example for a 17” full metal monitor F2:



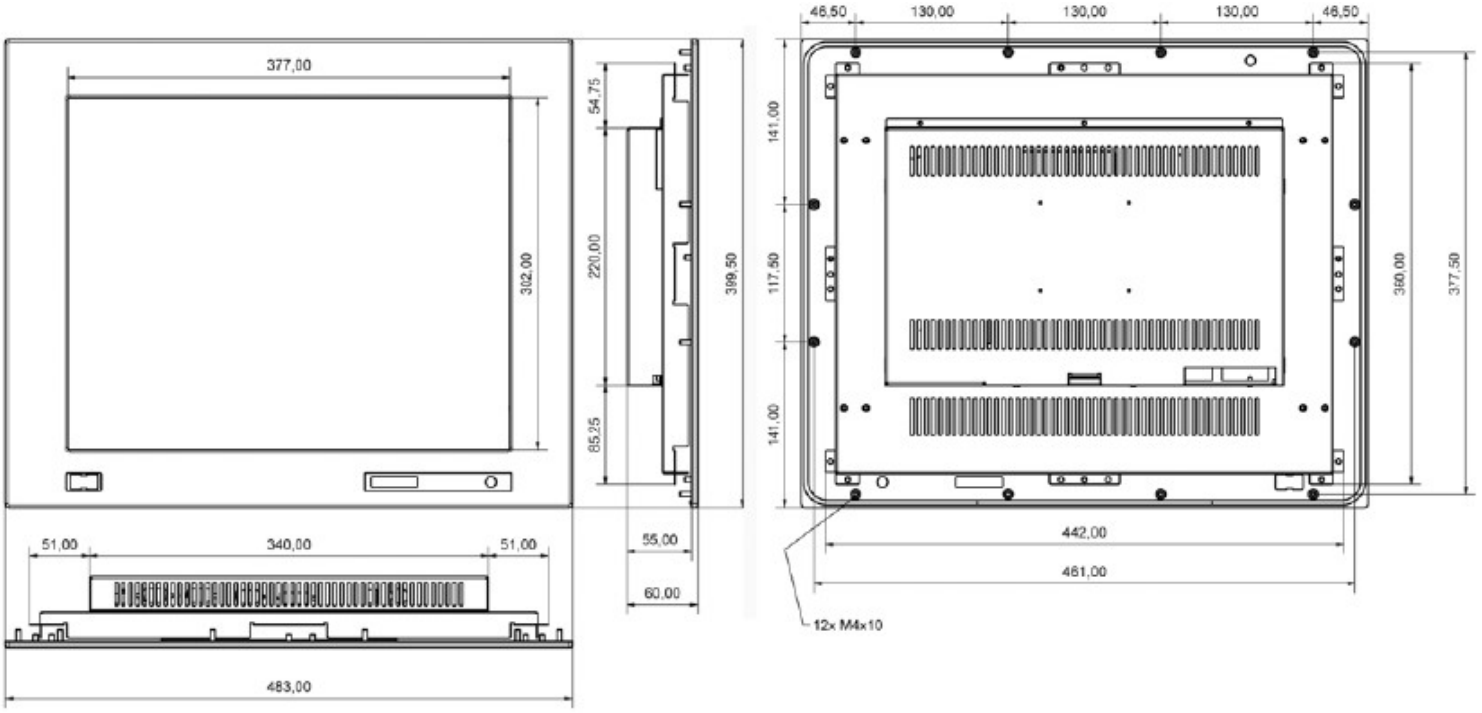
19“ Chassis OE monitor



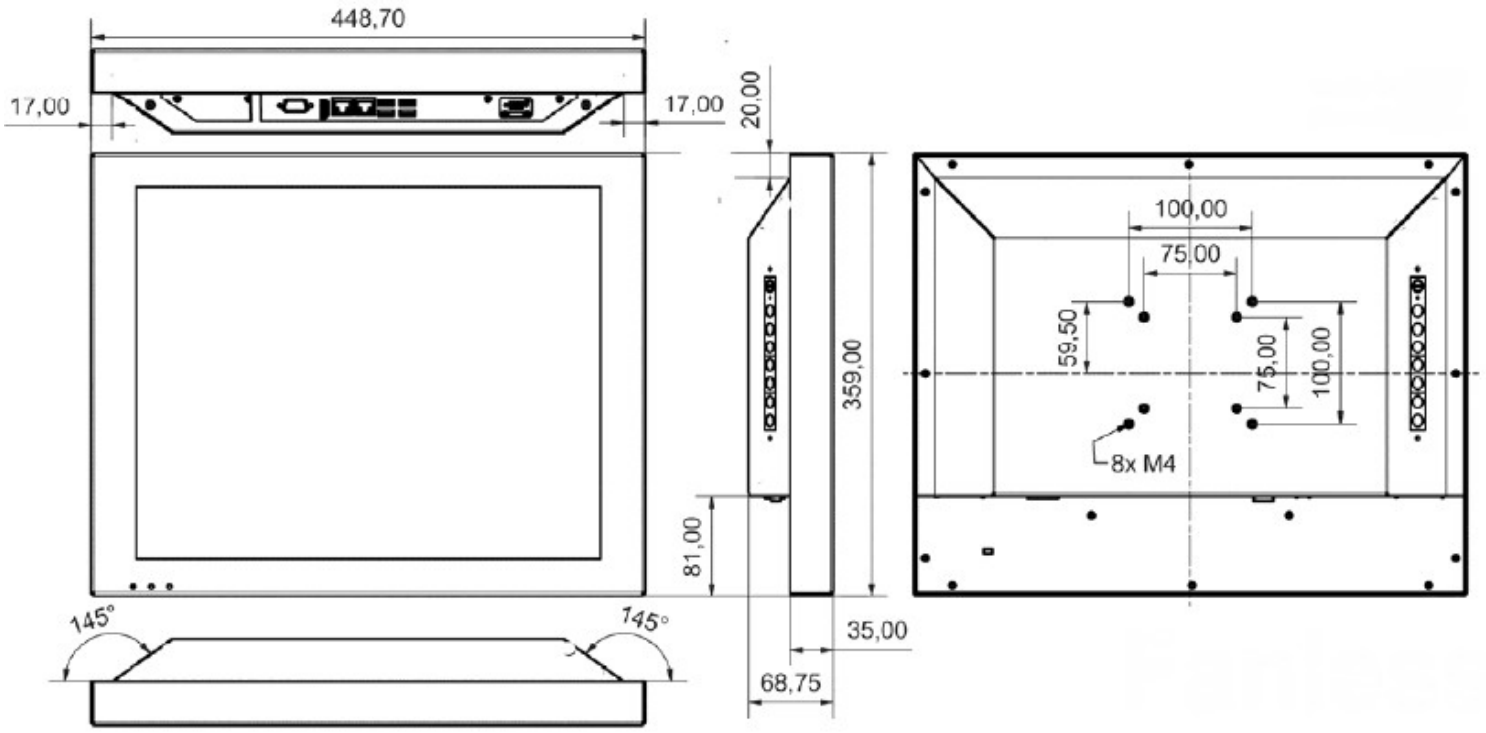
19“ Chassis WB monitor



Optionally a monitor with a bezel can be bought. Thus the dimensions are different. Here is an example for a 19” monitor (FS190xxDDxx):



Optionally a monitor with full-metal casing can be bought. Thus the dimensions are different. Here is an example for a 19” full metal monitor F2:



8. Service Information

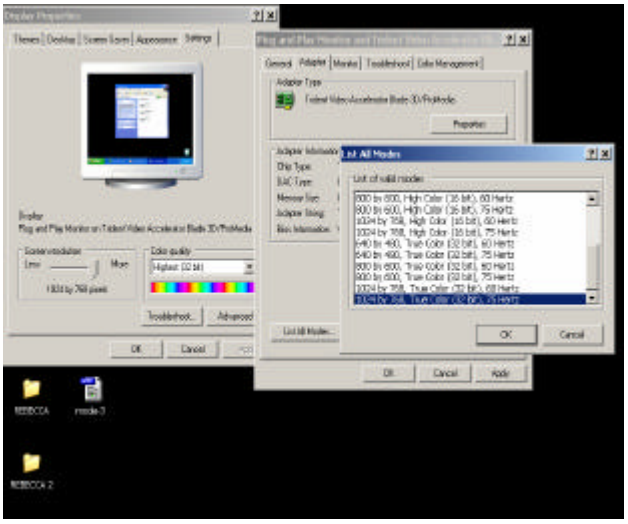
Your monitor has been tested by a qualified test person. The test procedure is recorded at a test protocol. This form contains the serial number, date, type of product and the test passed.

When you buy this excellent LCD Monitor, you receive 1 year warranty from us. Please contact us if you need any information about our product or help.
Thank you for buying our product again.

9. Windows setup

For the best view, please set up with the monitor type in Windows.
Please select as following:
Control Panel > Monitor > Setting > Advance > Monitor > Change > Show all List > Stand >

15" For 1024 ×768, please set to XGA 1024 × 768@75Hz
(AV setup@60Hz)
17" /19" For 1280 ×1024, please set to SXGA 1280 ×1024@75Hz
(AV setup@60Hz)
19" For 1440 ×900, please set to WXGA+ 1440 ×900@75Hz
(AV setup@60Hz)



= Company has the right to change the specifications without notice=

For support please contact us: support@snt-embedded.de

Keep this manual in an accessible place for possible future references.
Note the customer number/ order number and model of your device for service references on the space below.
The the model specification can be found on the back of your monitor and the order number can be seen on the delivery notice.

MODEL_____

ORDER NUMBER_____

s&t embedded GmbH
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Fax: +49 (0)89 37 00 06 – 89
Web: http://www.snt-embedded.de